SALTER Brecknell

S122

Light Industrial Scale

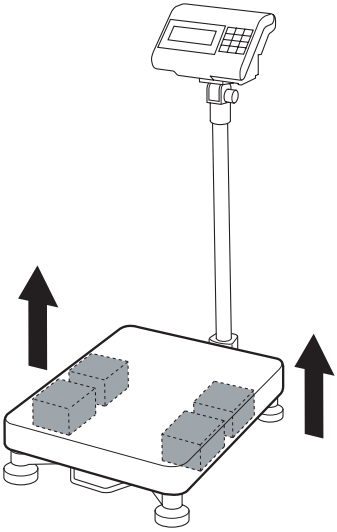
User / Service Instructions

ENGLISH

76104-180 Issue 0 *21.07.2004*

IMPORTANT

Before using the scale for the first time remove foam packing from under the shroud.



1. Lift off weigh plate
2. Remove 4 x foam packaging blocks
3. Replace shroud

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1 Warnings

1.1 Electrical installation

The power cord must be connected to a supply outlet with a protective earth ground. The electrical supply at the socket outlet must provide over current protection of an appropriate rating.

Pluggable equipment must be installed near an easily accessible socket outlet. Permanently connected equipment must have a readily accessible disconnect device incorporated in the fixed wiring.

For your protection all (110V or 230V) equipment used out of doors or in wet or damp conditions should be supplied from a correctly fused source and protected by an approved RCD to BS7071 or BS7288 or BS4293. **IF IN DOUBT SEEK ADVICE FROM A QUALIFIED ELECTRICIAN.**

1.2 Risk of electric shock

This equipment is powered by AC voltage which presents an electric shock hazard.

Always completely disconnect the power supply:

- Before removing the scale covers
- Before performing any routine maintenance
- Before cleaning the scale

1.3 Additional service precautions

- When the covers are removed, do not apply power to the unit unless specifically instructed to do in this handbook.
- When working on live equipment, exercise great care, use insulated tools and test equipment, and do not work alone.

- When testing or fault finding, exercise extreme care. Ensure that any test equipment used is in good condition and capable of with standing the existing voltages.
- All tools used must have insulated handgrips. Test probes and jumper leads must be in good condition with adequate insulation. Test probes with claw ends and jumper leads must not have insecure parts that may fail during use.

1.4 Safe handling

When lifting, moving or supporting the scale, take its weight into consideration.

1.5 ESD handling precautions

When handling printed circuit boards and electronic components, observe the following ESD handling precautions:

- Wear an grouned antistatic wrist strap.
- Ensure that all electronic components/boards are stowed appropriately, by use of conductive/antistatic work surfaces and packaging.

2 Introduction

2.1 Features

1. High performance A/D converter.
   - 0.3μv/ sensitivity
   - Sample speed 16 times / second
   - Maximum resolution : 15000
   - Non-linearity 0.01 % FS
   - -1 mv ~ +5 mv
   - Used range -1 mv ~ +14 mv
   - Load cell excitation power 5VDC ±5% 100mA.

2. Adjustable noise filter setting for the range of stability from 01 ~ 15.
3. Depending on the calibration division:
   - Standard division (under 10000)
     Capacity and weight must be calibrated.
   - High precision division (over 10000 to 150000 divisions)
     Linearity, capacity and weight must be calibrated.
4. Option with RS232 output .
5. Three options for the HOLD function.
6. AC / DC power supply.
7. LCD display.
8. Auto-power cut off to ensure performance stability. Power is cut off automatically if the power is below the low battery warning.
9. Built-in backlight.

2.2 Keys

ZERO

Zero key. Remove any weight on the platform before pressing the key.

Data entry key. Increments the value of the selected digit.

Displays the backlight option.

ENTER

Data entry key. Go to the next digit.

CLEAR ENTRY

Resets all values on the current display to zero.

Selects units of measure.

Switches between kgs and lbs.

COUNT

Selects counting mode.

SAMPLE

Sample key. Displays the number of items in the sample.

Totalize key. Displays the count number and total weight each time you add a weight to the platform. Remove the weight from the platform when finished.

RECALL

Recall totals. Displays the count number and then the total for a few seconds. To cancel totals press **CLEAR ENTRY**

while the count number or total is displayed.

TARGET

Sets checkweighing limits and beep option when in counting mode.

TARE

Tares off the displayed weight of a container. Enables you to enter a tare value when no weight is on the platform. To view a tare press **RECALL** followed by the tare key. To cancel a tare remove the container and press the tare key. To cancel a preset tare press **CLEAR ENTRY** while the tare is displayed.

2.3 Error messages

E1 When the scale is switched on, the weight on the platform is above or greater than the automatic zero range (greater than 10% of the capacity of the scale). Make sure that there is no weight on the platform. If the error persists, re-calibrate the machine.

E2 When the scale is switched on, the weight on the platform is below or lower than the automatic zero range (greater than 10% of the capacity of the scale). Correct service set up procedure has not been followed. Ensure calibration weight is applied and removed exactly in accordance with instructions.

E3 Not used.

E4 The weight on the platform is unsteady.

E5 There is a problem with the load cell. Check the wiring (see page 60). If the error persists, replace the load cell (see page 33).

E6 The internal zero value is greater than 360,000. The error may occur in calibration mode.

E7 The internal zero value is less than 240,000. The error may occur in calibration mode.

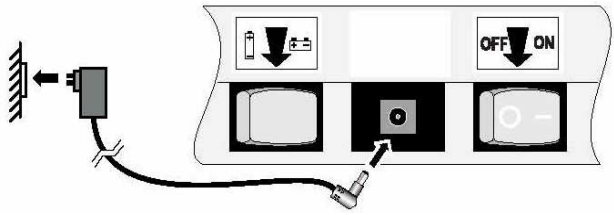
E8 This message will only appear for legal for trade scales. If you are configuring the capacity of the scale, the number of divisions cannot exceed 10,000.

--OL-- The weight is greater than the capacity of the scale.

------ Temporary error. Remove any weight from the platform, switch off and then on again. If this error persists, contact your authorized service agent.

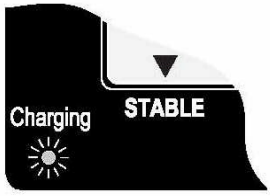
Connecting to the AC power supply.

Make sure that there is no weight on the platform before switching on.
Plug the power supply lead into the scale.



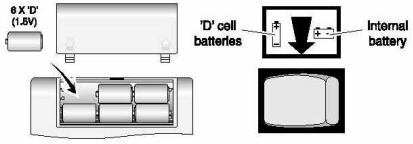
Make sure that the battery switch is set to the internal battery.

When the scale is connected to the AC power supply you will see a red, yellow or green charging lamp depending on the condition of the internal battery.



Using batteries

You can either use the internal rechargeable battery or use 6 size 'D' cell batteries (alkaline batteries are recommended).
Use the battery switch to select either the internal battery or the 'D' cells.



When this symbol flashes, you should either replace the ‘D’ cell batteries or recharge the internal battery.
Do not leave discharged batteries in the scale, as they may leak and cause serious damage. Do not store the machine with 'D' cell batteries in the battery compartment.

Recharging the internal battery

While the machine is connected to the AC power supply and internal battery is being recharged, the power supply light will turn red, yellow, and then green.

To maintain the rechargeable battery in good condition, it should be kept fully charged wherever possible. If the battery is to be stored, the rechargeable battery should be fully charged before storage and then recharged at 3 month intervals.

Disposing of the scale.

The scale contains a lead-acid battery. When disposing of the machine, you should take it to an appropriate recycling facility.

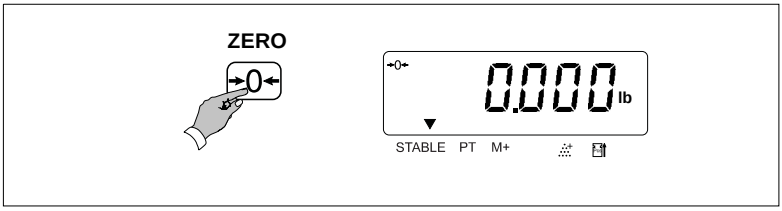
3 Using the scale

Depending on the option of the machine, some functions may not be available.

If the ▼ icon above the **STABLE** legend flashes while you are using the scale, it means that the weight on the platform is unsteady.

3.1 Zeroing the scale

Remove any weight from the platform.



3.2 Data entry keys

Whenever you need to enter values when setting totalizing, check weighing or pre-set tares, use the following keys:

Increments the value of the selected digit.

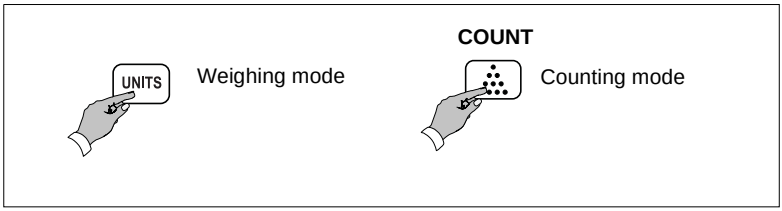
ENTER

Go to the next digit.

CLEAR ENTRY

Restore all settings on the current display to zero.

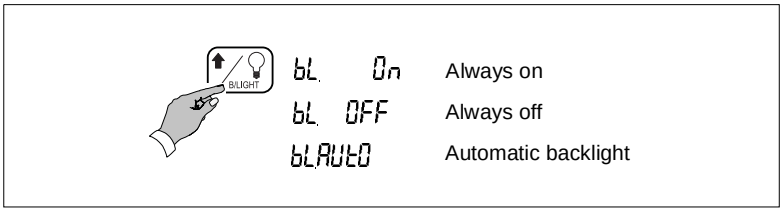
3.3 Selecting weighing or counting



If no sample size has been set you will be prompted to sample some items.

3.4 Using the backlight (option)

Each press of the backlight key shows:

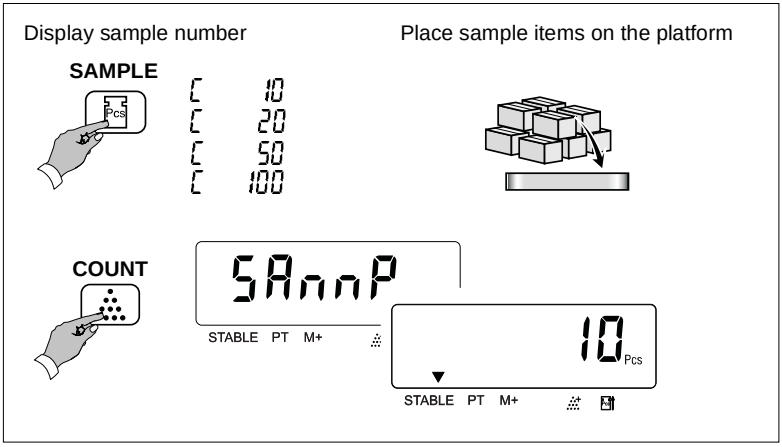


If set to automatic, the backlight comes on automatically when the indicator is being used. A backlight may not be available on some scale.

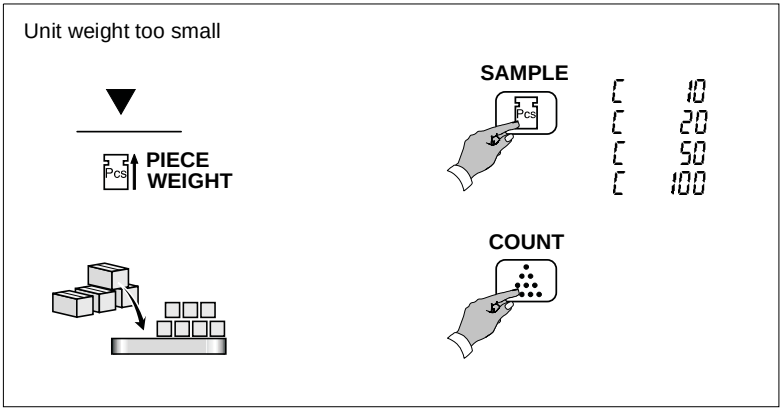
3.5 Switching between lbs and kgs

3.6 Sampling

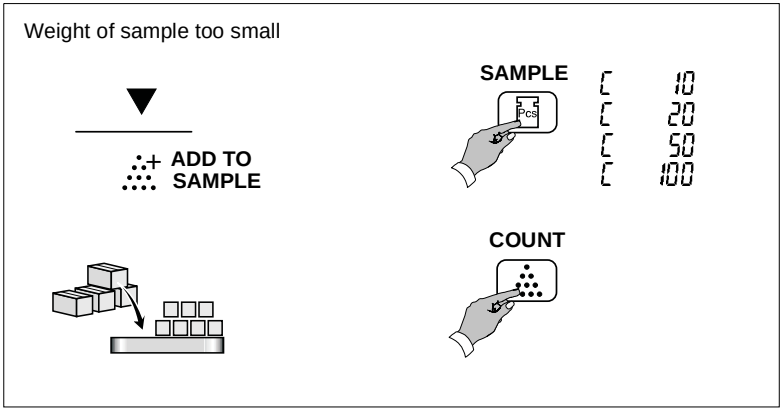
When selecting the number of items you wish to use as a sample remember that the larger the sample size, the more accurate the counting will be.



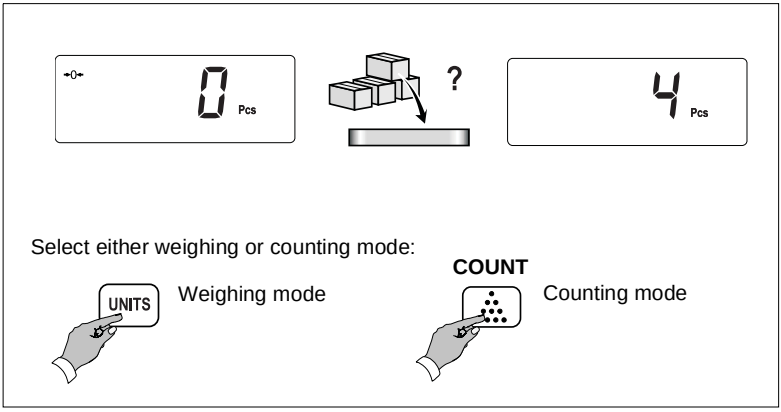
If you see ▼ above the piece weight icon it means that the unit weight of each item is too small and this may lead to an inaccurate count.



If you see ▼ above the add to sample icon it means that the weight of the sample is too small. Unless you increase the weight of the sample the count may be inaccurate count. You should select a greater number of samples and add these to the scale.



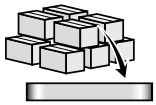
3.7 Counting



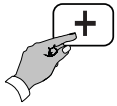
If you select counting mode and no sample size has been set you will be prompted to sample some items.

3.8 Totalizing

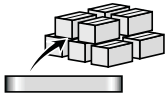
For each weight that you want to add:



ADD



The count number and then the total weight will each be displayed for a few seconds.

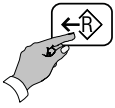


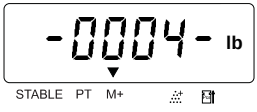
Remove the weight from the platform when finished.

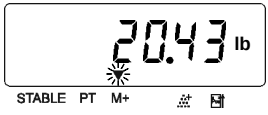
3.9 Recalling totals

The count number and then the total will each be displayed for a few seconds before returning to the current display.

RECALL

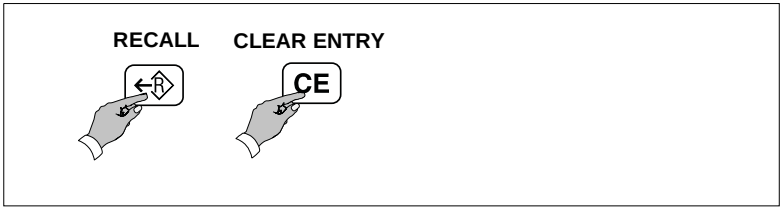






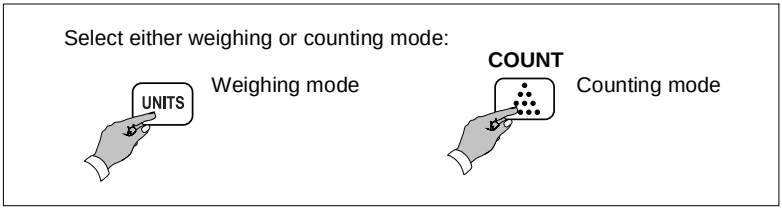
3.10 Canceling totals

Press the clear key while the count number or total is displayed.

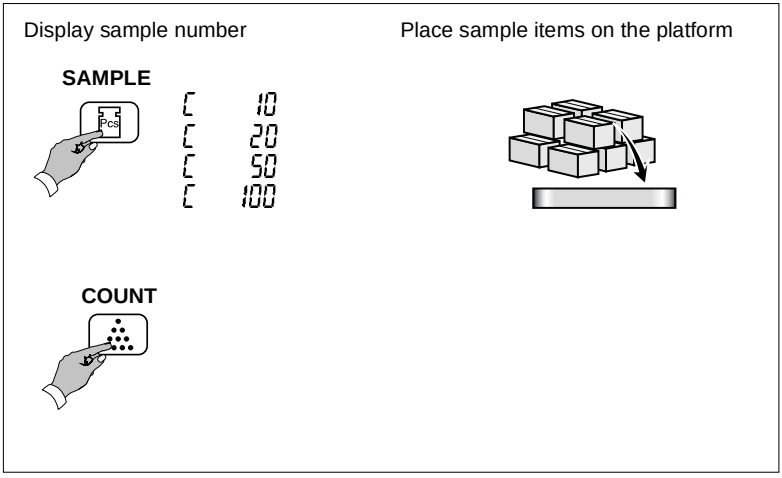


3.11 Checkweighing

3.11.1 Setting check-weighing limits



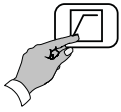
If you select counting mode and no sample size has been set you will be prompted to sample some items.

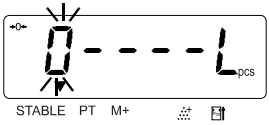


3.11.2 To set the lower limit

Example: 50 items

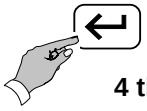
TARGET



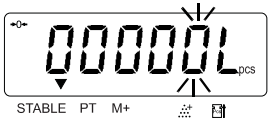


To move along the display:

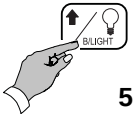
ENTER



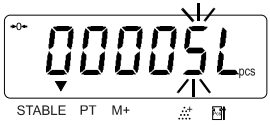
4 times



To change the displayed value:

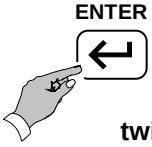


5 times



To move along the display:

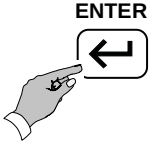
ENTER

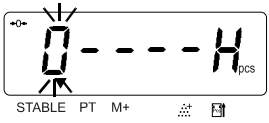


twice

To enter the lower limit:

ENTER

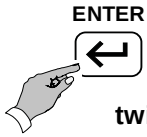




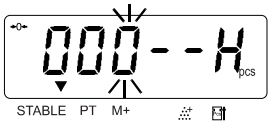
3.11.3 To set the higher limit

Example: 1000 items

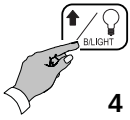
To move along the display:



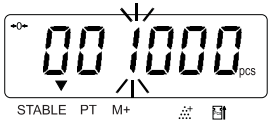
twice



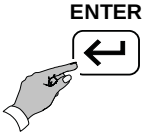
To change the displayed value:

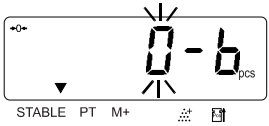


4 times



To enter the higher limit:



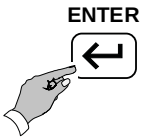


3.11.4 To set the alarm

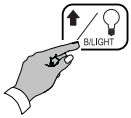
Example: beep when between targets

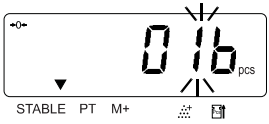
To move along the display:

ENTER



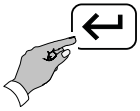
To change the displayed value:

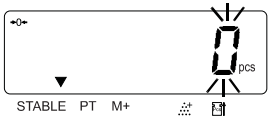




To enter the alarm setting:

ENTER





The target beep can be:

00 = No target beeps
01 = Beep when between targets
02 = Beep when outside targets

3.11.5 Limit indicators

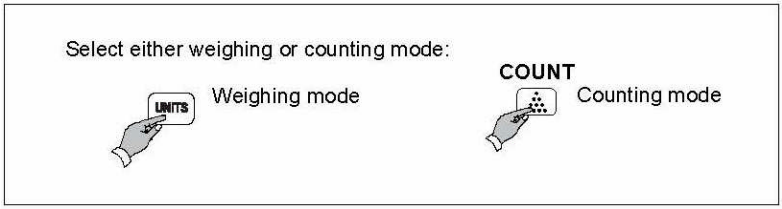
While using the scale you will see the following indicators to tell you the status of the check-weighing:

LOW The weight/number of items is below the lower limit.

OK The weight/number of items is between the upper and lower limit.

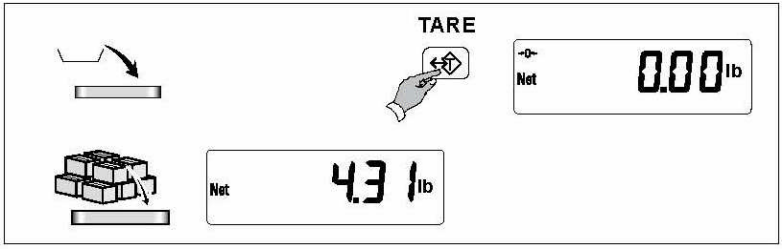
HIGH The weight/number of items is above the upper limit.

Using tares

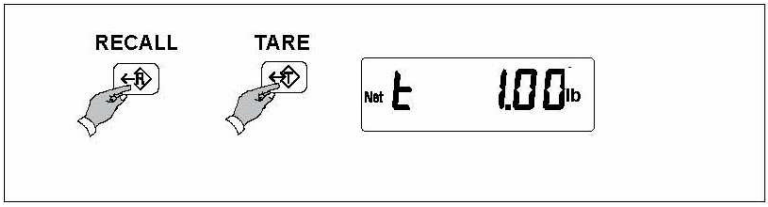


If you select counting mode and no sample size has been set you will be prompted to sample some items.

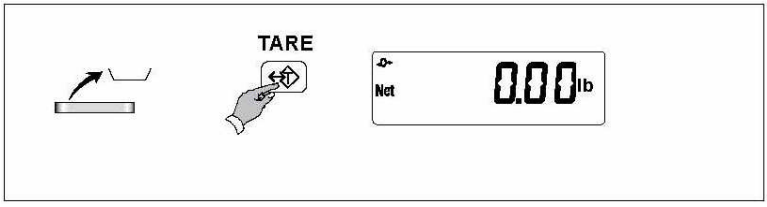
Creating a tare



Viewing a tare

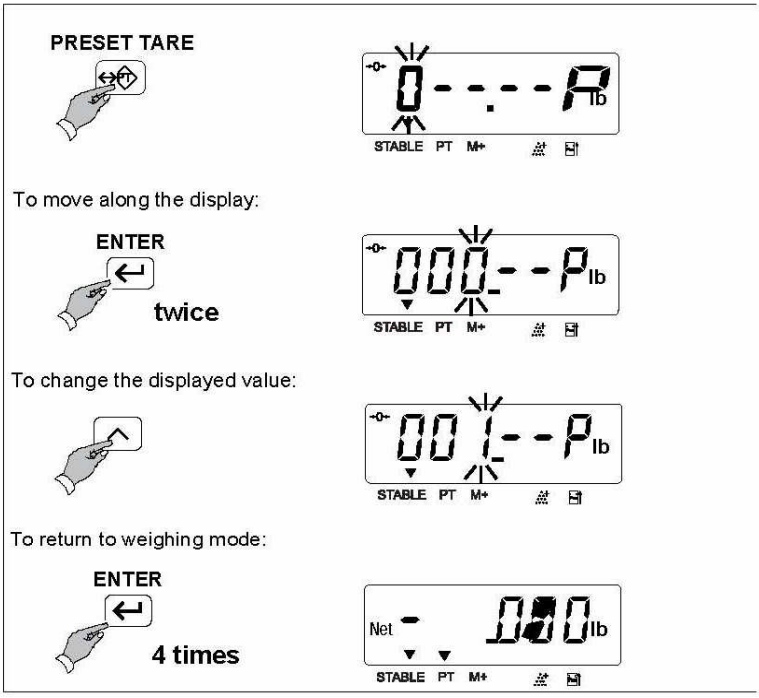


Canceling a tare

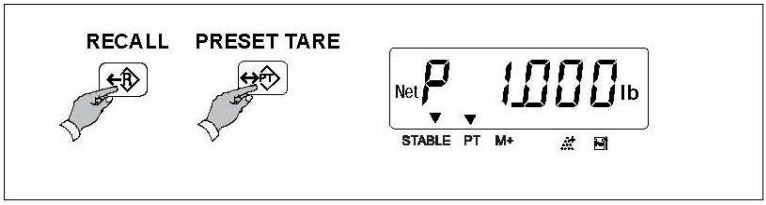


Creating a preset tare

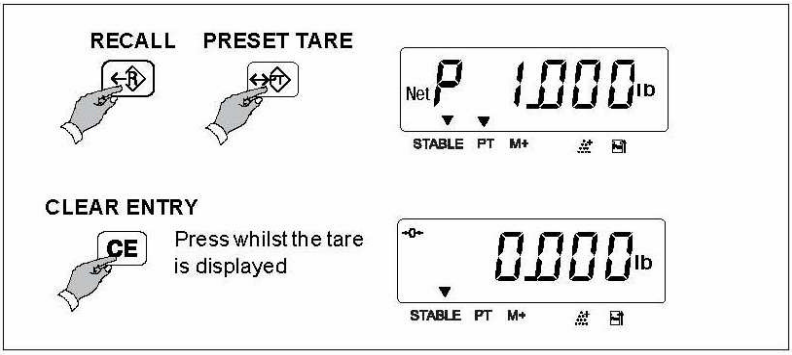
Example: 1lb



Reviewing a pre-set tare value



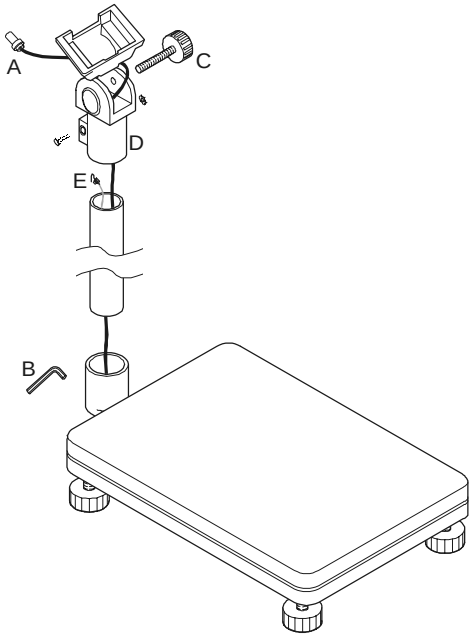
Canceling a pre-set tare



4 Installation/Maintenance

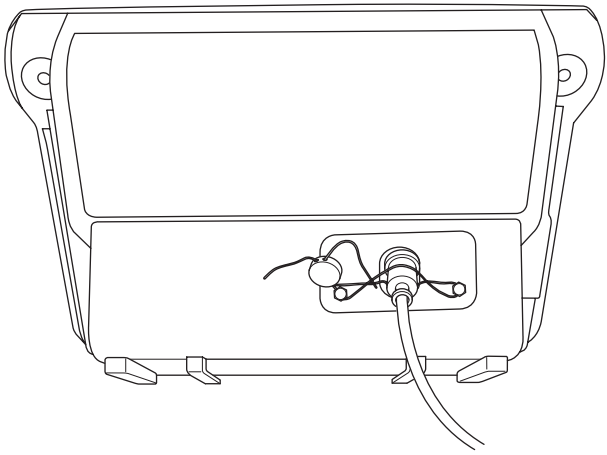
4.1 Connecting the column

1. Lift the weigh plate off the platform and remove the packing material.
2. Thread the load cell cable **A** through the column.
3. Fasten the column to the platform using the Allen key **B** provided.



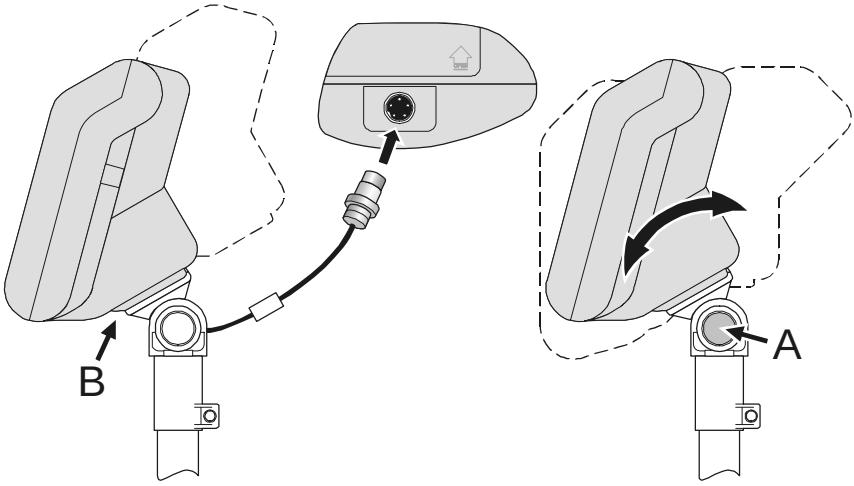
4. Remove the knob **C** from the bracket **D** and slide the hinge apart slightly so that the plug can be threaded through the center of the bracket. Reassemble the bracket.

5. For legal for trade scales, make sure that the grounding connector **E** is attached to the lip of the column. If a ferrite bead is used it should hang on wire between connector **A** and bracket **D**.
6. Fasten the bracket to the column. Make sure that the clamp is at the back of the scale.
7. For legal for trade scales in US territory the scale must be sealed in the following manner.



4.2 Connecting the indicator

1. Slide the indicator onto the bracket until it clicks into place.
2. Plug the connector from the platform into the indicator.



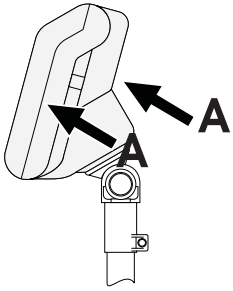
3. To adjust the angle of the indicator, loosen the knob **A** and move the indicator until it clicks into the required position.
4. To remove the indicator, disconnect, then press the release catch **B** and carefully slide the indicator off the platform.

4.3 Opening the covers

You will need to remove the covers in order to set up RS232 PIN connections.

Electrostatic sensitive device
Observe all precautions for handling electrostatic discharge sensitive devices.

1. If required, remove the indicator from the column.
2. Remove the battery cover.
3. Unscrew and remove the two cross-head screws.
4. Press in the bottom cover at point A to release the clips on either side of the head. Then carefully slide the covers apart. You do not need to disconnect any of the wiring.



5. To set up the PIN connections for RS232 communications, see section 4.4.
6. Reassemble the covers replacing the screws.
7. Replace the indicator onto the column.

4.4 RS232 PIN assignments

The RS232 serial communications board allows the indicator to send data to an external device such as a printer or computer. The default baud rate is 2400. To change the settings see section5.8 The wiring circuit of the RS232 communication board is shown on page 59.

J1 and J3 SHORT; J2 and J4 OPEN (default)

PIN 2 → RXD
PIN 3 → TXD
PIN 7 → GND

Other pins are not used.

J2 and J4 SHORT; J1 and J3 OPEN

PIN 2 → TXD
PIN 3 → RXD
PIN 7 → GND

Other pins are not used.

4.6 Replacing a load cell

1. Switch off and disconnect the scale from the AC power supply.
2. Remove the shroud.
3. Disconnect and remove the indicator from the column.
4. Remove the knob from the bracket and slide the hinge apart slightly so that the plug can be threaded through the center of the bracket. Reassemble the bracket.
5. Remove the bracket from the top of the column.
6. For legal for trade scales, remove the grounded connection.
7. Remove the column.
8. Remove the two clips holding the cable to the platform.
9. Remove the four M8x 20mm socket head screws and remove the load bridge.

   Note: these bolts will be very tight.
10. Turn the platform over and remove the four M8x 20mm socket head screws holding the load cell to the platform.

    Note: these bolts will be very tight.
11. Remove the load cell. Desolder the plug and retain.

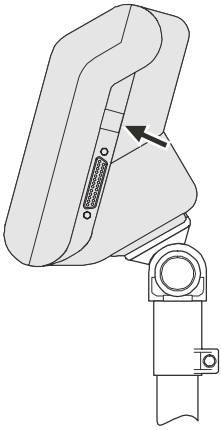
To replace the load cell, reverse the above procedure and resolder the plug if necessary.

Torque settings for all bolts to the load cell are: 440 pound-force.

5 Configuration Mode

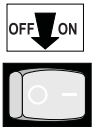
5.1 Entering configuration mode

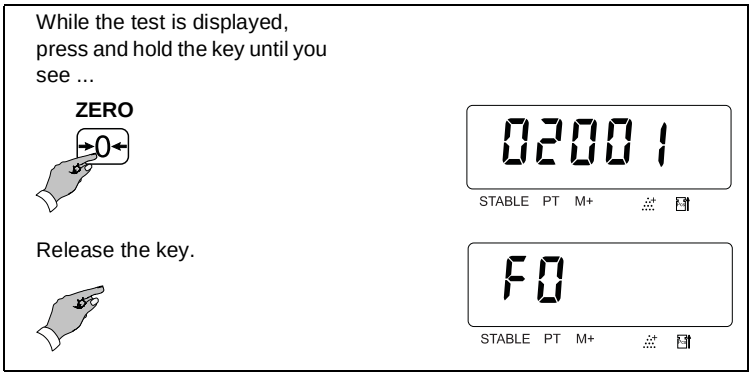
In order to enter configuration mode you must first set the configuration switch to the unlocked position. The switch is located under the tamper proof seal above the serial communication socket on the right-hand side of the head.



Locked position **Unlocked position**

Set the configuration switch to the unlocked position.





5.1.1 Service mode keys

The following keys are available in service mode:

TARE

Accept the entered values and go to the next section.

CLEAR ENTRY

CE

Cancel all values for the current display.

ENTER

Go to the next digit or field.

B/LIGHT

Increment the value of the current (usually flashing) digit.

ZERO

0

Go to previous digit

5.2 Configuration menu

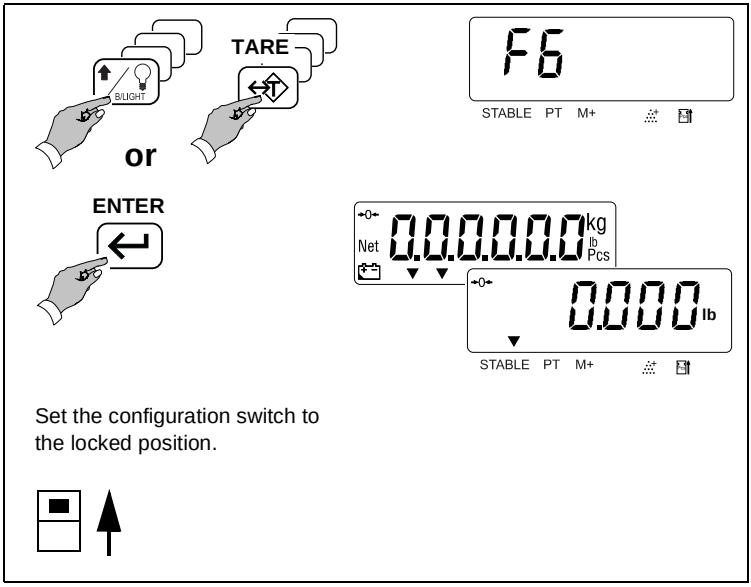
The menu consists of functions F0 to F9. To go down the functions press

(F0 to F9). To go back up the functions press **TARE** (F9 to F0).

Function number	Function description	See page...
F0	**Weight calibration**	Page 38
F1	**Specification settings**	Page 40
F2	**Noise filter setting**	Page 44
F3	**Zero display setting**	Page 45
F4	**Check-weighing settings**	Page 46
F5	**Print option**	Page 48
F6	**Exit configuration mode**	Page 37
F7	**Display internal value**	Page 55
F8	**HOLD function**	Page 56
F9	**Software lock**	Page 58

5.2.1 F6 - exiting configuration mode

Remember to set the configuration switch back to the locked position.

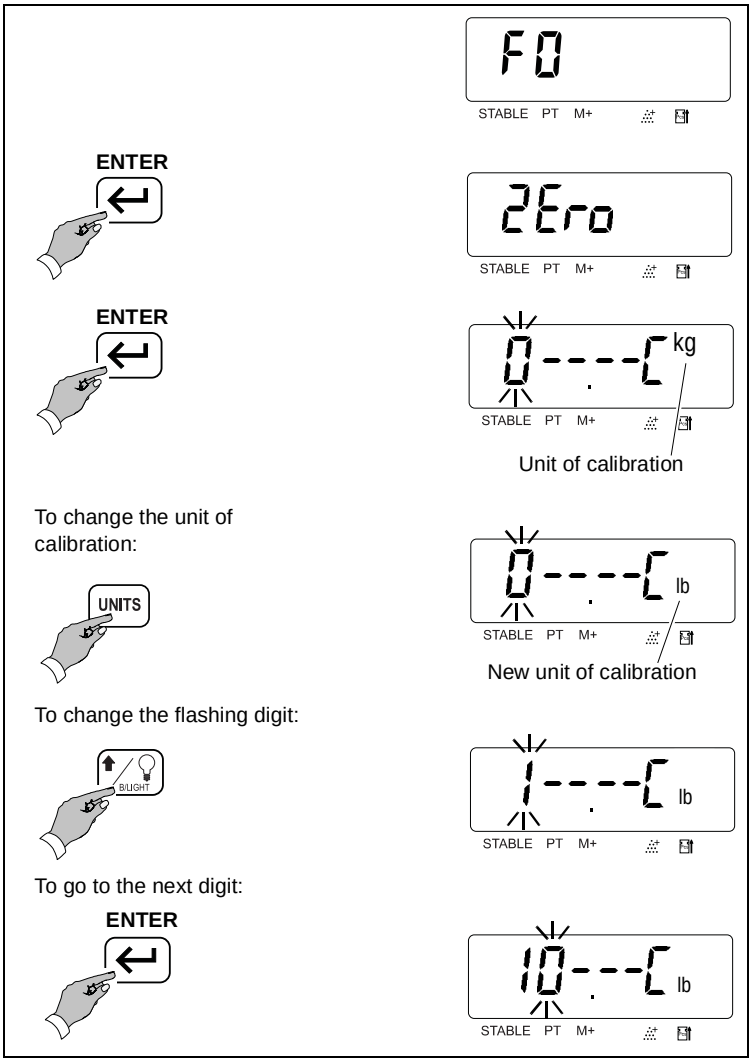


5.3 F0 - weight calibration

- Ensure the hold function (**F8**) is set to **hold 0**.

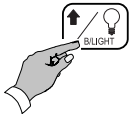
Please remember .....

The calibration weight must be over 0 weight or any weight less than the full capacity of the machine.



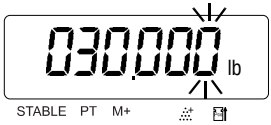
Repeat to enter the calibration weight.
For example, to enter 30 lb:

twice

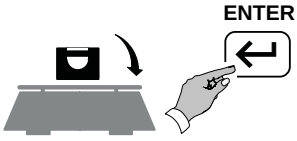


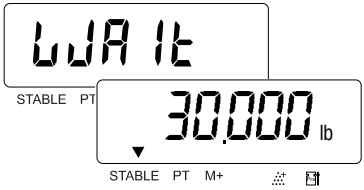
3 times

3 times

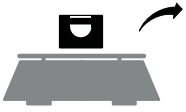


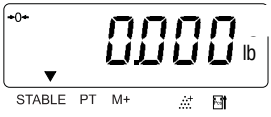
Place the calibration weight on the platform. Press the enter key.





Remove the calibration weight.





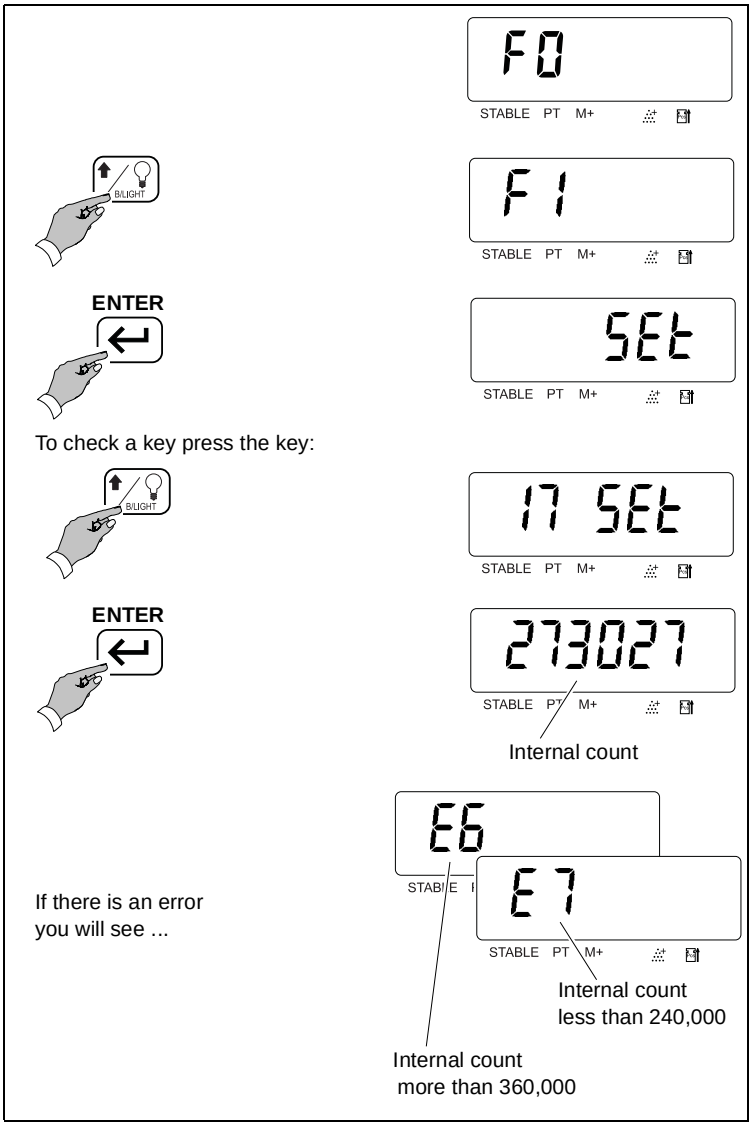
5.4 F1 - specification settings

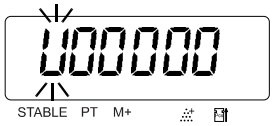
- Ensure the hold function (**F8**) is set to **hold 0**.
See page 57

5.4.1 Keyboard check

You can perform a keyboard check. If the correct code appears when you press a key then you know that the key is functioning correctly, see the table below. You cannot check the **ENTER** key as it takes you to the next step.

Function key	Code	Function key	Code
COUNT	**3E**	**RECALL**	**27**
PRESET TARE	**3d**	**CLEAR ENTRY** CE	**2b**
ZERO	**37**	UNITS	**1E**
TARE	**3b**	**TARGET**	**1d**
SAMPLE	**2E**		**17**
ADD	**2d**		


F0
STABLE PT M+
B/LIGHT
F1
STABLE PT M+
ENTER
SEt
STABLE PT M+
To check a key press the key:
B/LIGHT
17 SEt
STABLE PT M+
ENTER
273027
STABLE PT M+
Internal count
E6
STABLE
E7
STABLE PT M+
If there is an error
you will see ...
Internal count
less than 240,000
Internal count
more than 360,000



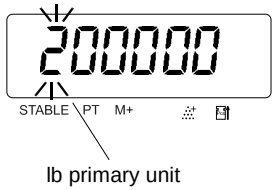
Unit options are:

digit 1	1= kg, 2= lb
digit 2	0= no 2nd unit 1= kg, 2= lb
digit 3	Must be set to 0
digit 4	0= kg display 1= g display
digit 5	0= lb display 1= lb, oz display
digit 6	Not used

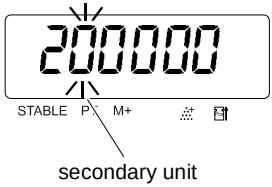
Examples:

kg only	**100**xxx
lb only	**200**xxx
kg, lb units	**120**xxx
lb, kg units	**210**xxx

To change the flashing digit:

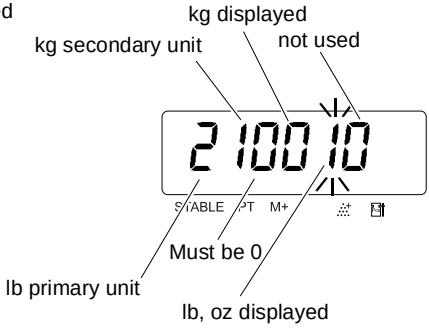


To go to the next digit:

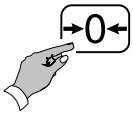


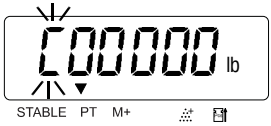
Repeat until you have entered the required oiptions.

Example: 210010
21 = dual units lb and kg
digit 4 = kg displayed
digit 5 = lb, oz displayed



ZERO

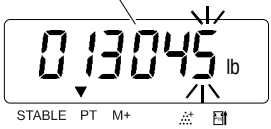




ENTER

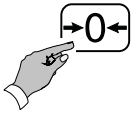
Press ↵ and BLIGHT to enter the required capacity:

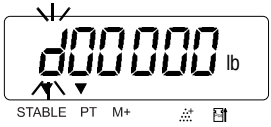
130lb capacity



Full capacity + 9d
max lb wight=(max kg wghtx2.24)
60kgx20g **006018**
150kgx50g **015045**
300kgx100g **003009**
130lbx0.05lb **013045**
330lbx0.10lb **003309**
660lbx0.20lb **066010**

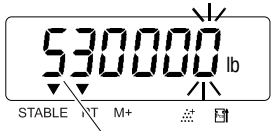
ZERO





ENTER

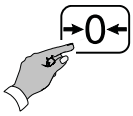
Press ↵ and BLIGHT to enter the weight settings:

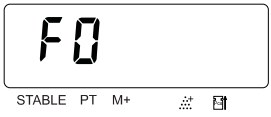


Divisions=0.05lb

digit 1 = divisions (1, 2, or 5)
digit 2 = decimal places (1, 2, or 3)
digits 3 - 6 = 0

ZERO

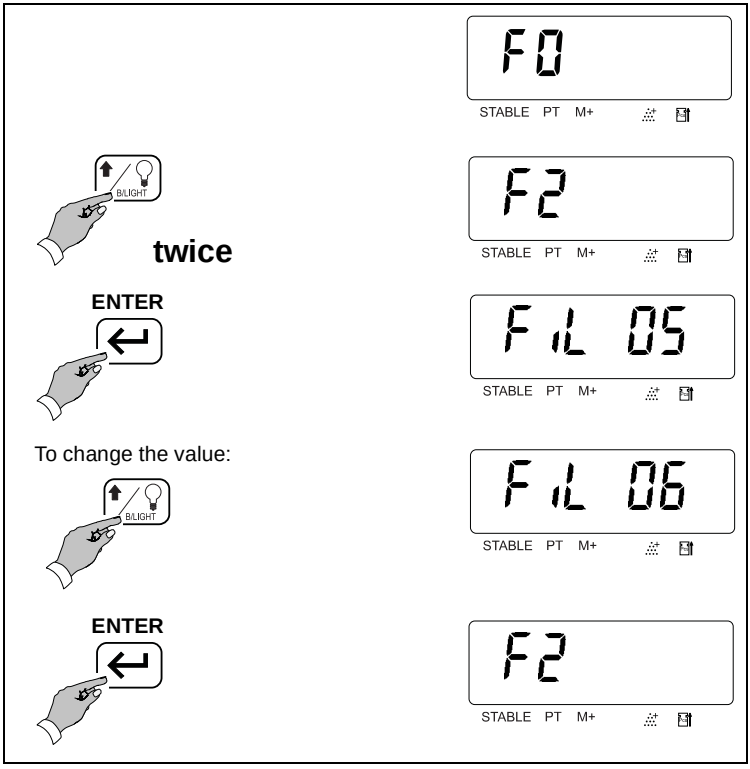




5.5 F2 - noise filter setting

The range of stability is from 01 to 15. Enter a setting appropriate to the environment.

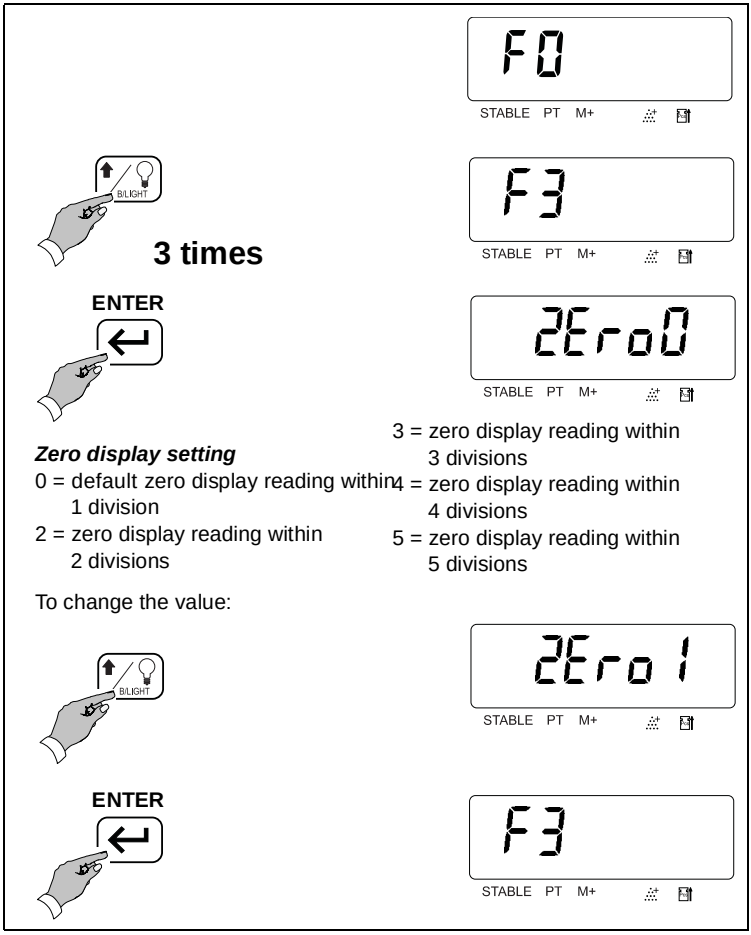
- The higher the value the quicker the machine reaches stability but weighing is less accurate.
- If the environment is unstable enter the value 15.
- If the environment is stable enter the value 05. This is the default value.
- Ensure the hold function (**F8**) is set to **hold 0**.



5.6 F3 - zero display setting

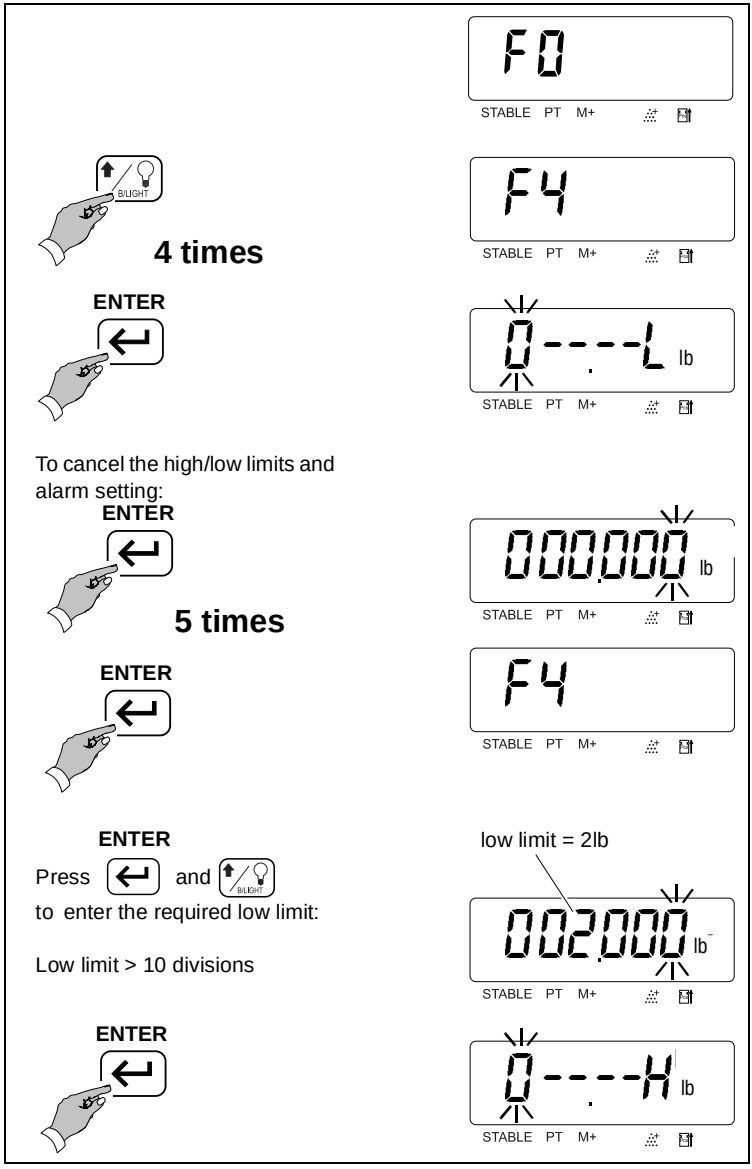
MUST BE SET TO 0 AT LEGAL FOR TRADE SCALES.

- If the load cell gives unstable readings set to 5 which is the maximum.
- If the load cell gives stable readings set to 0 which is the minimum.
- Ensure the hold function (**F8**) is set to **hold 0**.



5.7 F4 - checkweighing function

- Ensure the hold function (**F8**) is set to **hold 0**.

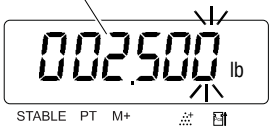


ENTER

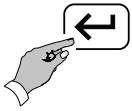
Press ↵ and BLIGHT to enter the required high limit:

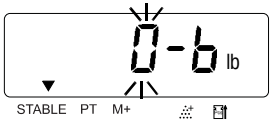
High limit ≥ low limit

high limit = 2.5lb



ENTER

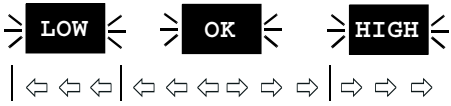




Check-weighing alarm digit 1
0 = Stable, beeps and LCD on
1 = Stable, beeps whether stable or not and LCD on
2 = Whether stable or not, beeps and LCD on

Check-weighing alarm digit 2
0 = No beeps
1 = OK (over low limits and under high limits), beeps
2 = Under or equal to low limit (must be over 10d) and over or equal to high limit, beeps

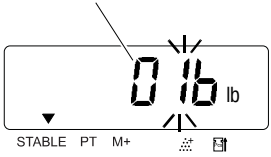
LCD indication



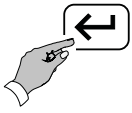
ENTER

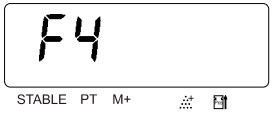
Press ↵ and BLIGHT to enter the required alarm setting:

01 = Beep between targets



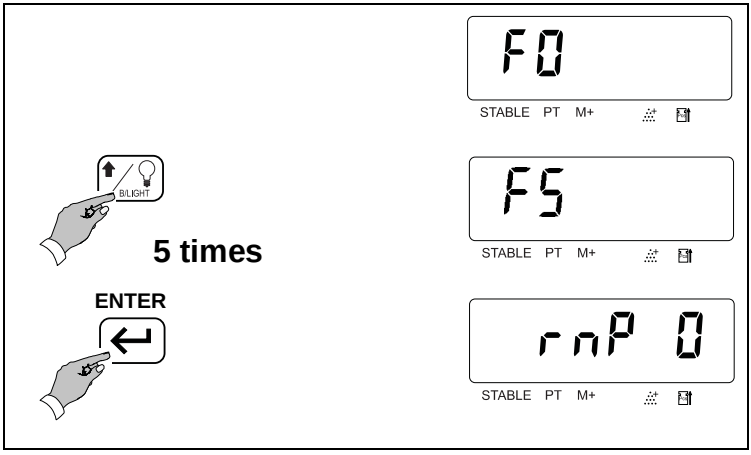
ENTER





5.8 F5 - print option

- Ensure the hold function (**F8**) is set to **hold 0**.
- To transmit to a computer short pins J1 and J3.
- To transmit to a serial printer short pins J2 and J4.



Printer options are shown below:

0 Printing disabled.

1 Stable transmit for a PC.

2 Continuous printing for a PC.

3 Simple printing for serial printer. Press **ENTER** to print.

4 Full printing for serial printer. Press **ENTER** to print.

5 Stable printing (accumulation).

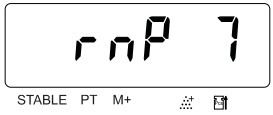
6 Full printing for EZ-2 printer. Press **ENTER** to print.

7 EZ-2 printer. Press **ENTER** to print.

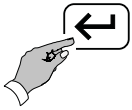
To change the printer setting:

Example EZ-2 printer

7 times



ENTER



Default baud rate

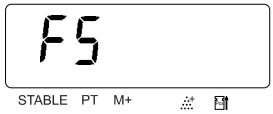
Display the setting required by the EZ-2 printer:

Baud rate options are:
1200, 2400, 4800, 9600

3 times

New baud rate

ENTER



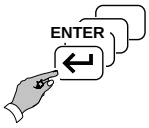
5.8.1 Printer outputs

The S122 can be connected to a computer running a suitable application or a 40 column printer, see the typical outputs below.

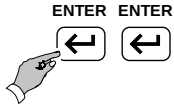
rnP 1

PC stable transmit

When the weight is stable press the key to transmit each transaction to the PC.



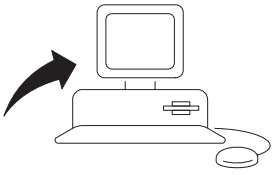

```
ST,NT,+   1.000lb
ST,NT,+   1.000lb
ST,NT,+   2.002lb
ST,NT,+   2.004lb
ST,NT,+   0.000lb
ST,TR,+   1.000lb
ST,NT,+   0.990lb
ST,NT,+   0.990lb
ST,NT,+   1.000lb
ST,NT,+   1.000lb

ST=Stable weight
NT=Gross weight
TR=Net weight in operation
```



TARE

rnP 2

Continuous transmission to PC



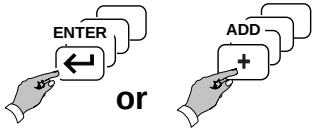
```
UlbS,NT,+1.000lb
US,NT,+   1.000lb
ST,NT,+   1.000lb
ST,NT,+   1.000lb
US,NT,+   1.000lb
US,NT,+   1.000lb
ST,NT,+   0.890lb
ST,NT,+   0.890lb
ST,NT,+   1.000lb
ST,NT,+   1.000lb
```

The weight is continuously transmitted to the PC.

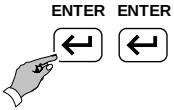
rnP 3

Simple mode for serial printer

To transmit each transaction to the printer:



To transmit the total to the printer:

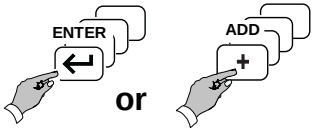



```
S/N       WT/lb

_ _ _ _ _ _ _ _
001       2.000
002       1.000

_ _ _ _ _ _ _ _
0002      3.000
```

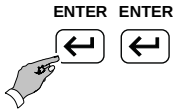
rnP 4

Full mode for serial printer

To transmit each transaction to the printer:



To transmit the total to the printer:

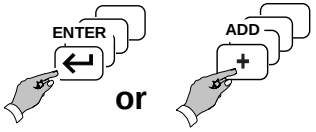



```
TICKET NO.0001
G         1.000lb
T         0.000lb
N         1.000lb

TICKET NO.0002
G         2.000lb
T         0.000lb
N         2.000lb

TICKET NO.0003
G         2.000lb
T         1.000lb
N         2.000lb

TOTAL NUMBER
OF TICKETS 0003
TOTAL
NET       4.000lb
```

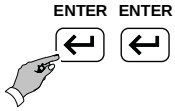
rnP 5

Stable printing (accumulation)

To transmit each transaction to the printer:



To transmit the total to the printer:

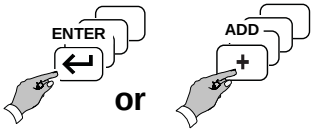



```
S/N      WT/lb
--------------
001      1.000
002      2.000
003      2.000
004      2.000
005      2.000
--------------
005      9.000
```

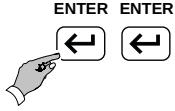
rnP 6

Full mode for EZ-2 printer

To transmit each transaction to the printer:



To transmit the total to the printer:




```
TICKET NO.0001
G        1.000lb
T        0.000lb
10152    1.000lb
03
TICKET NO.0002
G        1.000lb
T        0.000lb
10152    1.000lb
03
TICKET NO.0003
G        2.000lb
T        0.000lb
N11      2.000lb
03
```

rnP 7

Stable transmit to EZ-2 printer

To transmit each transaction to the printer:

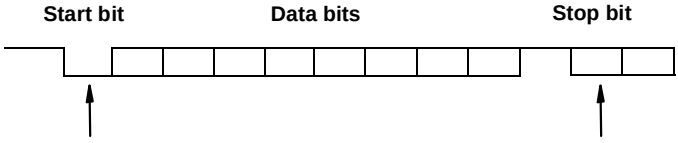
151123+ 1.000lb
151123+ 1.000lb
151123+ 0.000lb
151123+ 0.000lb
151123+ 2.000lb
151123+ 2.000lb

5.8.2 RS232 interface specification

I. Mode : EIA-RS0232 C's UART signal

II. Format:

Baud rate	Can select 1200, 2400, 4800, 9600 BPS
Data bit	8 bits
Parity bit	None
Stop bit	1 bit
Code	ASCII



5.8.3 Data format

Data format for stable and continuous transmission.

Head	,	Head	,	Data										Unit		C	LF
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

kg/lb

Head 1 (2 bytes)	Head 2 (2 bytes)
OL Overload, under load	
ST Display is stable	NT Net mode
US Display is unstable	GS Gross mode

Data (8 bytes)

2D (HEX)= "-" (minus)

2E (HEX)= "." (decimal point)

Unit (2 bytes)

kg =6B (HEX) ; 67 (HEX)

lb =6C (HEX) ; 62 (HEX)

Example 1: +0.876kg stable weight and net value

Head	,	Head	,	Data								Unit		C	LF
S	T	,	N	T	,	+			0	.	8	7	6	k	g	0D	0A

Example 2: -1.568lb unstable weight and net value

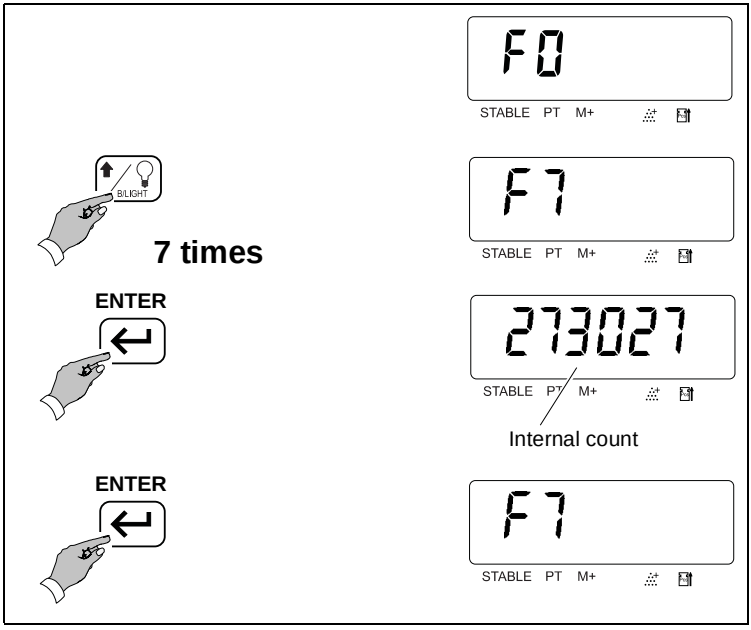
Head	,	Head	,	Data								Unit		C	LF
U	S	,	N	T	,	-			1	.	5	6	8	l	b	0D	0A

5.9 F6 - exiting configuration mode

See page 37.

5.10 F7 - displaying the internal count

- Ensure the hold function (**F8**) is set to **hold 0**.

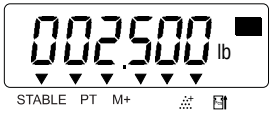


5.11 F8 - setting the hold function

You can set up the hold function so pressing the ENTER key prints the displayed value. You must also set up the correct transmit baud rate for the receiving device.

Hold 0
No hold function.

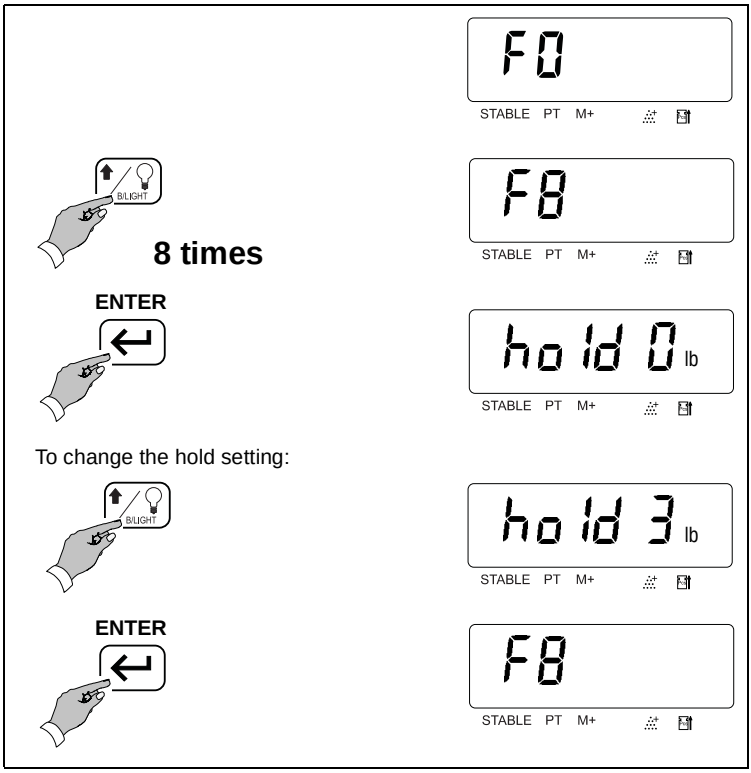
Hold 1
When the weight is continuously changing the scale automatically holds the maximum value.



Press any key other than ENTER to clear the hold.

Hold 2
When the weight becomes stable the scale automatically holds the displayed value. Press any key other than ENTER to clear the hold.

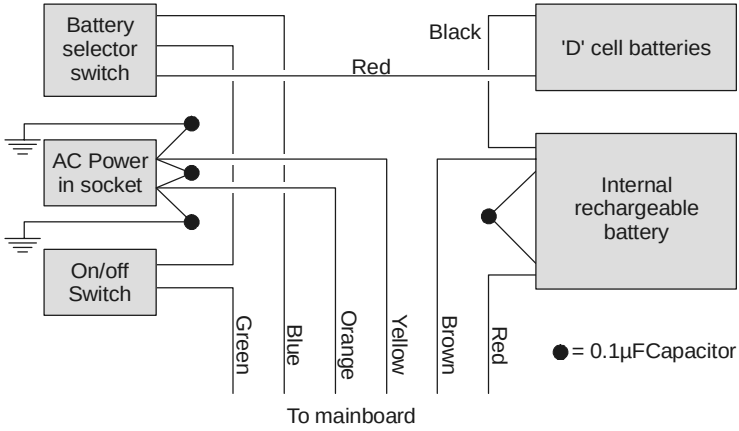
Hold 3
When the weight becomes stable the scale automatically holds the displayed value. The hold clears when the weight is removed and the machine returns to zero weight.


F0
STABLE PT M+
B/LIGHT
8 times
F8
STABLE PT M+
ENTER
hold 0 lb
STABLE PT M+
To change the hold setting:
B/LIGHT
hold 3 lb
STABLE PT M+
ENTER
F8
STABLE PT M+

6 Wiring Diagrams

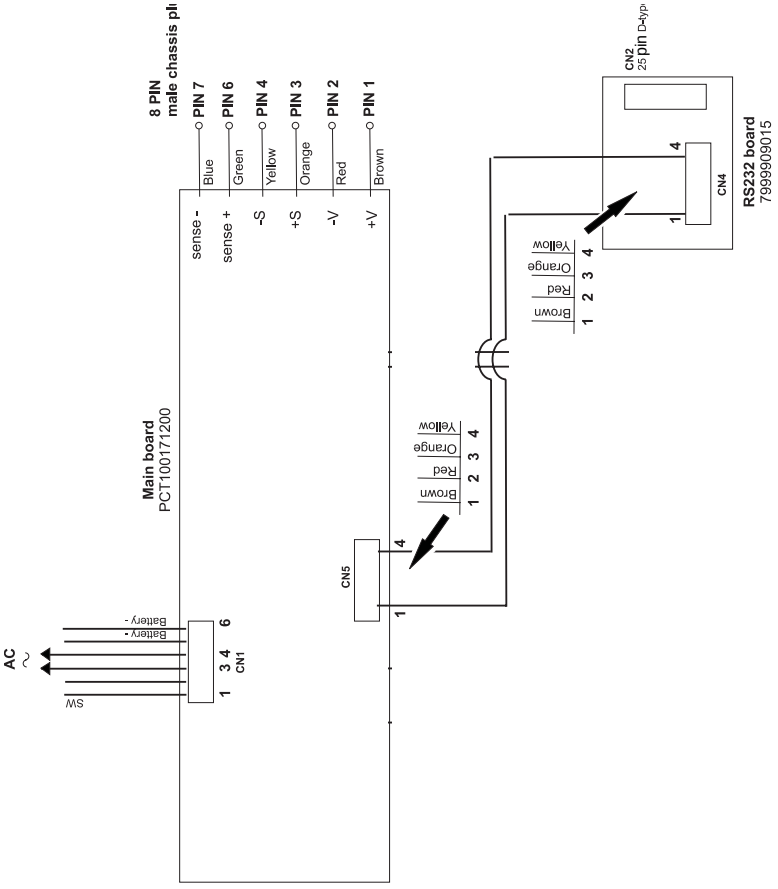
Electrostatic sensitive device
Observe all precautions for handling electrostatic discharge sensitive devices.

6.1 Power supply connections

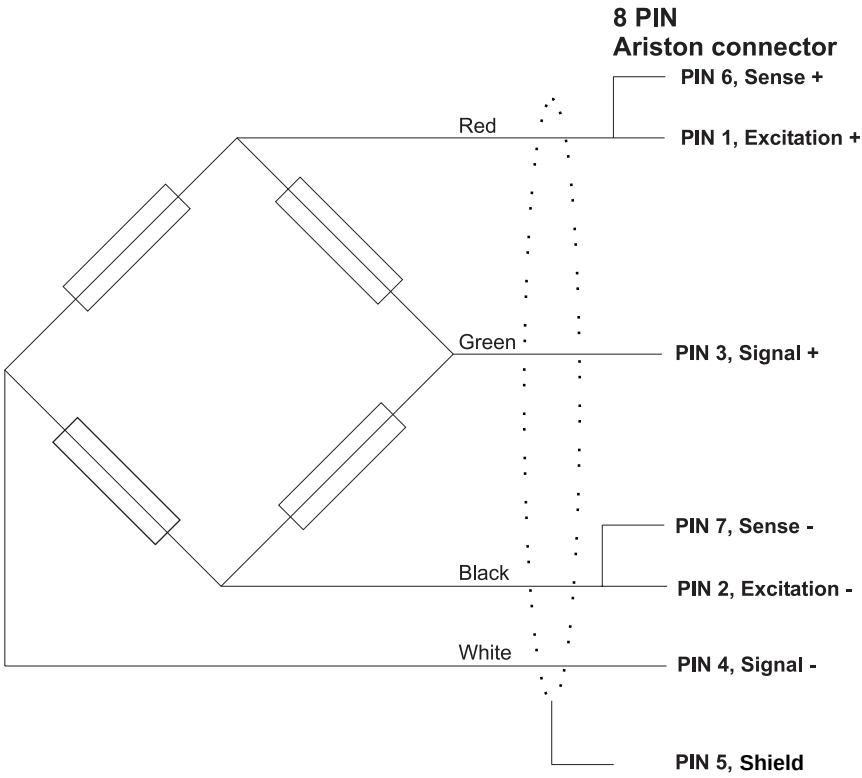


Note: All connections are soldered.

6.2 Main board connections

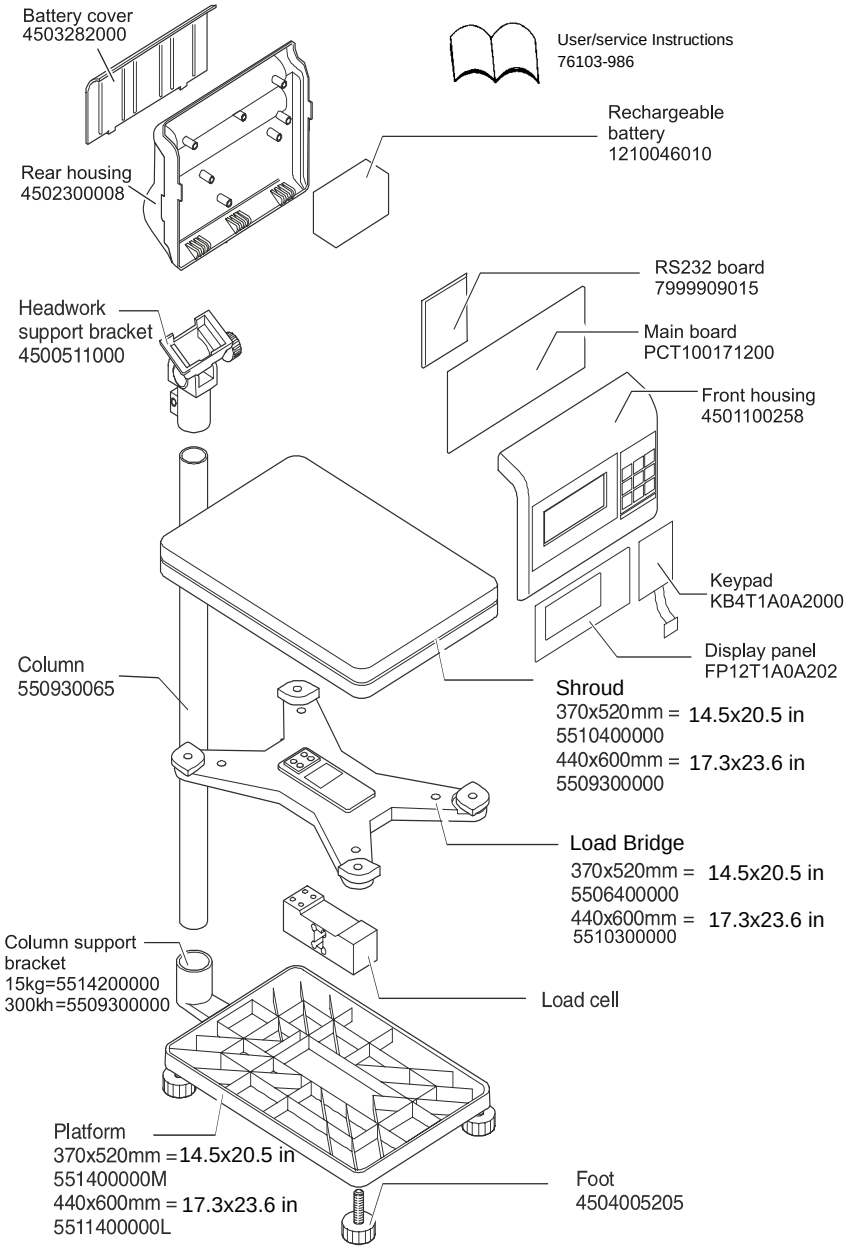


6.3 Load cell connections



7 Parts Lists

7.1 Illustrated part lists



7.2 Additional parts

Description	Part number
Sealing screw kit	SER/L120/0002
Ground spring	SER/L120/0003
On/Off switch	1111001111
Battery selector switch	1111001221
Load cell connector - male 5-way	1240001051
Load cell connector - male 6-way	1240001061
Load cell connector - female - 5-way	1240001050
Load cell connector - female - 6-way (approved)	1240001060
Keyboard	KB4T1A0A2000
Keyboard overlay	1220355122
Power adaptor - USA 110	1140780136

The address of your Salter Brecknell center is

This document contains a general guide only of the product and shall not form part of any contract unless specifically agreed by Salter Brecknell Weighing in writing in each case on the Order Acknowledgement. The specification of the products described herein may vary from time to time and may be altered without notice.

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